

Date: Tue, 29 Jun 93 02:35:37 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #791
To: Info-Hams

Info-Hams Digest Tue, 29 Jun 93 Volume 93 : Issue 791

Today's Topics:

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 Apollo reflectors
 APT-Sats: Report JUNE 26, 1993
 Broadband baluns for VHF/UHF
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 Licensing question
 Macintosh Ham Software?
 Mac Morse Software
Model numbers and Band (how do you know?)
Old Hams never die, They just ...
 Whats a 115N05?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 29 Jun 93 01:24:41 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-
state.edu!caen!usenet.coe.montana.edu!netnews.nwnet.net!serval!wsuaix.csc.wsu.edu!
i7994779@network.UCSD.EDU
Subject: [ANS] Wanted: Simple,Cheap,2m antenna project
To: info-hams@ucsd.edu

In article <C9CuEs.FJ5@fc.hp.com> perry@fc.hp.com (Perry Scott) writes:

>E. Michael Smith (ems@michael.apple.com) wrote:

>

>: At VHF PVC isn't very good since it starts to absorb signal... but

>: at HF it should not be an issue.

>

>I have compared the RF absorption of PVC vs water in a microwave oven.

>PVC does not absorb RF in the microwave region. Maybe your PVC is

>different - give it the microwave oven test.

>

QST in teh July issue has an article on building 2m antennas that include using PVC. In one the actual wires are inside the PVC. Wouldn't the antenna be poor if if PVC absorbed signal? Since these were both meant for HTs I would assume PVC doesn't absorb signal.

```
=====
Patrick D. Walters           Washington State University
i7994779@wsuaix.csc.wsu.edu  NW Collegiate Cycling Conference Director
Voice at (unavailable)      KB7VPO
=====
```

Date: 28 Jun 1993 20:46:51 -0500

From: usc!wupost!cs.utexas.edu!gerald@cc.utexas.edu!emx.cc.utexas.edu!not-for-mail@network.UCSD.EDU

Subject: Apollo reflectors

To: info-hams@ucsd.edu

henry@zoo.toronto.edu (Henry Spencer) says:

>In article <1993Jun22.171014.25314@phx.mcd.mot.com> schuch@phx.mcd.mot.com (John Schuch) writes:

>>I seem to remember a TV program, (NOVA I believe) that said one of the apollo
>>missions left an optical corner reflector on the surface. In the program, some
>>school was bouncing a laser off of it to measure the exact distance from the
>>Earth to the moon.

>Well, "school" is not quite the right word -- "research group" is correct.

>When you fire a respectably powerful laser pulse at one of those reflectors
>through a good telescope, the return pulse averages *one photon*. Detecting
>this is not an amateur project.

You are both right, really. In the US, a "school" can mean a university as well as a "kiddie school". One of the groups that did the early lunar laser stuff was here at U. Texas, so "university research group" would be correct. And yes, even with a 2.7m diameter telescope firing the pulses and collecting the returns, a couple of photons is a typical count.

It's pretty important stuff, but it was not appreciated by the astronomers sharing the telescope. The laser guys would only take over if the "seeing" (atmospheric stability) was good, and at least one astronomer used to put the telescope out of focus whenever the laser crew wanted to check the size of the images. Very naughty (and it wasn't me - those of us who observe faint objects do it close to new moon, which is not a good time for firing laser beams at the moon).

I forget now why this is in rec.radio.amateur.misc. -

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

Date: Tue, 29 Jun 1993 07:13:25 GMT
From: usc!howland.reston.ans.net!newsserver.jvnc.net!gmd.de!
peter.henne@gmd.de@network.UCSD.EDU
Subject: APT-Sats: Report JUNE 26, 1993
To: info-hams@ucsd.edu

Observed at station 50.7 NLat, 7.1 ELon, JUNE 26, 1993

NOAA-9: APT 137.62 On
NOAA-10: APT 137.50 On
NOAA-11: APT 137.62 On
NOAA-12: APT 137.50 On
Meteor 3-3: APT 137.85 On
Meteor 3-4: APT 137.30 *OFF*

NOAA-9 has drifted to later morning. This nearly 10 year old spacecraft continues to transmit images of increasing quality due to better illumination of its descending passes. Meteor 3-5 was APT-inactive during all visible periods. Meteor 3-3 suffers from malfunction of its exposure-control, resulting in stripes of brightness-variations in the image.

(I regret the inconvenience if this was posted
before - our mailer was down)

|Peter Henne (peter.henne@gmd.de) |
|German Nat.Research Center.f.Comp.Science |
|D-5205 St.AUGUSTIN 1 |
|Fed.Rep. of Germany |

Date: 28 Jun 93 10:50:14 EDT
From: psinntp!arrl.org@uunet.uu.net
Subject: Broadband baluns for VHF/UHF
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, jdc3538@ultb.isc.rit.edu (J.D. Cronin) writes:

>
>Are there any broadband baluns or impedance matching devices
>that cover, say, 6-meters to 220 mhz? Do toroids work that
>far up?

Toroids will work up to at least a few hundred MHz if you keep the wire length down to a fraction of a wavelength. You often see broadband couplers using tiny toroids and very fine wire. Of course, this isn't too practical if you are looking for low loss/high power handling capability. The impedance is also a factor--the lower the impedance the easier it often is to go higher in frequency, particularly if you can easily make your windings transmission lines of the right impedance for the desired transformation. You might study transmission line transformers if you are interested in why this isn't too practical for most amateur VHF work.

BTW, I wondered why the good old 10 bifilar turns of #28 wire on an FT-37-43 worked so great as a 50 to 200 ohm transformer. Turns out the winding was around 100 ohms, about what you want for a wide bandwidth transmission line transformer. I asked Wes and it *wasn't* intentionally designed to be a transmission line transformer.

Zack Lau KH6CP/1

Internet: zlau@arrl.org "Working" on 24 GHz SSB/CW gear
Operating Interests: 10 GHz CW/SSB/FM
US Mail: c/o ARRL Lab 80/40/20 CW
225 Main Street Station capability: QRP, 1.8 MHz to 10 GHz
Newington CT 06111 modes: CW/SSB/FM/packet
amtor/ baudot
Phone (if you really have to): 203-666-1541

Date: 29 Jun 93 08:11:56 GMT

From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 28 June
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 179, 06/28/93
10.7 FLUX=123.7 90-AVG=112 SSN=111 BKI=1112 1112 BAI=004
BGND-XRAY=B3.7 FLU1=1.5E+06 FLU10=3.6E+04 PKI=2112 2232 PAI=006
BOU-DEV=008,007,008,012,008,008,006,015 DEV-AVG=009 NT SWF=00:000
XRAY-MAX= C6.2 @ 0122UT XRAY-MIN= B3.0 @ 2349UT XRAY-AVG= B9.4
NEUTN-MAX= +003% @ 1350UT NEUTN-MIN= -001% @ 1855UT NEUTN-AVG= +0.3%
PCA-MAX= +0.2DB @ 2110UT PCA-MIN= -0.4DB @ 0005UT PCA-AVG= +0.0DB
BOUTF-MAX=55375NT @ 1407UT BOUTF-MIN=55333NT @ 1935UT BOUTF-AVG=55356NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+083,+000,+000
GOES6-MAX=P:+124NT@ 1747UT GOES6-MIN=N:-063NT@ 2143UT G6-AVG=+107,-017,-044
FLUXFCST=STD:128,130,130;SESC:128,130,130 BAI/PAI-FCST=010,015,025/010,015,030
KFCST=2224 3222 2334 3333 27DAY-AP=004,006 27DAY-KP=2111 2211 1123 2222
WARNINGS=*SWF;*MAJFLR;*PROTON;*PCA
ALERTS=**SWEEP:II=1@2208-2211UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 27 JUN 93 was 73.7.
The Full Kp Indices for 27 JUN 93 are: 2+ 1+ 2o 2+ 2+ 2o 2o 1o

Date: 28 Jun 93 16:48:00 GMT
From: usc!hacgate!dunes!tony@network.UCSD.EDU
Subject: Field Day. A bummer!
To: info-hams@ucsd.edu

In article <9306281219.AA04823@umassmed.UMMED.EDU>, sbaker@umassmed.UMMED.EDU
(Stephen Baker) writes:

|> Wayne Cronin WA5VIF writes:
|> : Subject: Field Day: a bummer!
|> : To: info-hams@ucsd.edu
|> :
|> : I operated Field Day in class 1D (home station, commercial power) from
|> : here in Tempe, Arizona.
|> :
|> : Propagation, to put it nicely, STUNK!!!
|> :
|> : I only operated 6M and 10M, but listened on the other bands, and it
|> : seems like they had it no better.
|> :
|> : So, how about it folks? How did it go in other parts of the country?
|>
|> We did pretty well on 15m in WMA as N1FCC.
|> --

|>
|>
|> Stephen P. Baker phone: (508) 856-2625
|> Lecturer in Biostatistics (508) 856-3131 fax
|> Department of Academic Computing (413) 253-3923 home
|> University of Massachusetts Medical School e-mail: sbaker@umassmed.ummed.edu
|> 55 Lake Avenue North -. -.. .---- .--. ...
|> Worcester, MA 01655

Must have been his antenna...

we were kick'n in California! 15 was solid til about 10PM! then 20
went on till 4am, then 40 was driven us home till 15 came back!

it was great...

Date: Mon, 28 Jun 93 22:04:27 GMT
From: usc!cs.utexas.edu!utnut!torn!nott!cunews!revcan!balsam!
cowan@network.UCSD.EDU
Subject: Field Day: a bummer!
To: info-hams@ucsd.edu

ham@wam.umd.edu (Scott Richard Rosenfeld) writes:

>
> 10 and 15 meters were BAD (1 QSO on 15 and none on 10 - little heard)
> 20 meters was almost as bad! (6 QSO's)
>

I worked 20m for 2 hrs on Saturday (as VE3 RAM) and logged 50 QSOs. I was on
the second shift, and the operators in front of us logged at least 100...
There was about 20 min where we couldn't get out around 17:00-1720 EDT, but
other than that it was no problem.

100W SSB was the mode of operation. Most of the QSOs went to Alabama, Florida,
Georgia, and the Carolinas. Picked up some in Arizona as well.

--
Darin Cowan - cowan@balsam.pinetree.org | I just try to make people's
VE3 OIJ | lives a little more surreal

Date: 29 Jun 1993 00:14:38 GMT
From: topaz.bds.com!topaz.bds.com!ron@uunet.uu.net
Subject: Field Day: a bummer!

To: info-hams@ucsd.edu

> Propagation, to put it nicely, STUNK!!!
>
> I only operated 6M and 10M, but listened on the other bands, and it
> seems like they had it no better.

Actually, we had the highest score on 20 we've had in three years.
20 never did completely die (I remember last year spending an hour
around 3AM trying to tweek one contact out before giving up). The
equipment each year has been the same (3 element monobander up 30
feet or so, Kenwood xcvr).

-Ron

Date: Tue, 29 Jun 93 02:02:44 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-
state.edu!caen!usenet.coe.montana.edu!netnews.nwnet.net!serval!wsuaix.csc.wsu.edu!
i7994779@network.UCSD.EDU
Subject: Field Day and Packet Clusters
To: info-hams@ucsd.edu

In article <1993Jun28.194957.23339@worldbank.org> dearnshaw@worldbank.org (Darrell
Earnshaw) writes:

>Over the weekend, I received many unsolicited requests for FD contacts on the
>local packet cluster. Consequently, a lot of terminal beeping was actually
>Announcements and Talk commands directed at getting FD contacts, rather than DX
>put-outs. Fortunately, the "SET/FILTER/BAND=ALL W" probably eliminated most of
>the extraneous noise. I'd like to pose the questions:

>
>- Is FD considered a contest?
>- If the answer is Yes, would that not invalidate any contacts made using
> the cluster (where someone with 0.5 watts could connect to a local node
> and then get credit for contacts in 3 or 4 states)?
>- If the answer to both is Yes, where does it stop? Using repeaters?
> Cellular telephones?

>
>Don't get me wrong, I'm not anti-Field Day, just curious as to how it fits in
>with the DX Spotting clusters.

>
>73 Darrell (NR3Y)

The station I was at had a packet setup and he was saying that they had to be
simplex connection, not on PBBSes. But, later I noticed he uploaded something for
extra points. I may have gotten it wrong, but I think that's what he did.

Patrick D. Walters	Washington State University
i7994779@wsuaix.csc.wsu.edu	NW Collegiate Cycling Conference Director
Voice at (unavailable)	KB7VP0

fax%sparc4@olivetti.COM (Marco Fassiotto) writes:

> I'm looking for the address and, if possible, the fax number of
> HAMRADIO magazine.

Sadly :-(Ham Radio Magazine is no longer. CQ bought the mailing list and subscription fulfillment obligations, but have failed to include the wonderful technical content that we used to know and love about "Ham Radio".

> Basically, what I'm looking for is a periodic publication with fairly high
> technical contents with also minor entries for other stuff like contesting
> dxing etc. and would appreciate any comment about the above one plus
> any suggestion other magazine especially 73.

Again sadly -- :-(-- the American education system has left most people barely capable of reading beyond a "See Dick. See Jane." level, and the magazines you are already subscribing to, particularly QST, are already criticised by many as being too technical already! Any more and....who knows ;^)

> I'm currently subscribed to QST and CQ but neither fully satisfies my wishes
> regarding tech articles.

QEX, expensive though it might be, may be your best bet. Then again, you are already subscribing to CQ, owner of the Ham Radio subscription lists and presumably technical stuff...though they remain well hidden! ;^)

And, QST does have some technical building projects...you may have to settle for a Euro magazine to get what you seek...

```
+-----+
| Jack GF Hill      |Voice: (615) 459-2636 -           Ham Call: W4PPT |
| P. O. Box 1685    |Modem: (615) 377-5980 -   Bicycling and SCUBA Diving |
+-----+
```


: David Van Nuys
: KD6WKT/AE
: vannuysd@sonoma.edu

There are a *few* files available from Apple's ftp site, 'ftp.apple.com', in the /pub/ham-radio directory. I may have a few more I've picked up over time, so e-mail me if you're interested.

Cheers,
Alan
acooney@netcom.com

Date: Sun, 27 Jun 1993 19:37:22 GMT
From: usc!howland.reston.ans.net!darwin.sura.net!knuth.mtsu.edu!raider!theporch!jackatak!martinbw@network.UCSD.EDU
Subject: Mac Morse Software
To: info-hams@ucsd.edu

danal@mentorg.com (Dana LeMoine) writes:

> I recently retrieved this file and used deHqX to undo the doings of
> binhex. This process removes the .hqx suffix and leaves the
> .sit suffix. My problem is now Stuffit doesn't recognize this file
> as anything worthy of display in any of it's list boxes.
>
> Any suggestions?
>
> --

Use ResEdit or some other utility like Drop-GetInfo or Overlay Info to change the type and creator to SPSV and SIT!

73

* Bruce W. Martin Internet: martinbw@jackatak.raider.net.com *
* 4558 Brooke Valley Dr. AOL: Dragon16 *
* Hermitage TN 37076-2650 HAM Call: KQ4TV *
* Voice: (615) 872-9942 Work: (615) 244-2022 *
* FAX/MODEM: (615) 885-4182 *

Date: Tue, 29 Jun 93 02:25:31 GMT
From: usc!math.ohio-state.edu!uwm.edu!caen!usenet.coe.montana.edu!
netnews.nwnet.net!serval!wsuaix.csc.wsu.edu!i7994779@network.UCSD.EDU
Subject: Model numbers and Band (how do you know?)
To: info-hams@ucsd.edu

I have noticed that many times on the net and in magazine ads that often a radio is talked about and the bands it operates on is never mentioned. Is there some way of knowing by the model number or do you people just know every model number and manufacturer there is? (Ok no Genius wannabes reply to that one!)

=====
Patrick D. Walters Washington State University
i7994779@wsuaix.csc.wsu.edu NW Collegiate Cycling Conference Director
Voice at (unavailable) KB7VPO
=====

Date: Mon, 28 Jun 1993 20:47:15 GMT
From: sdd.hp.com!cs.utexas.edu!asuvax!ennews!mcdphx!schuch@network.UCSD.EDU
Subject: Old Hams never die, They just ...
To: info-hams@ucsd.edu

In article <1993Jun28.124547.25000@hemlock.cray.com> dadams@cray.com writes:

>
>Old Hams never die, They just loose their connection?
>

Old Hams never die, they're SWR just gets reeeeeeeel high.

John

Date: 29 Jun 93 10:03:49 GMT
From: news-mail-gateway@ucsd.edu
Subject: Whats a 115N05?
To: info-hams@ucsd.edu

I am rebuilding a mid-sixties-vintage commercial RTTY demodulator [made by ITT-CREED]. It is tube-based, but some slimeball got at it before I did, and stole all the tubes. I have replaced most of them [they are almost all dual triodes wired as multivibrators and mono/bistables], but theres one tube which I am totally unable to identify. The chassis is labelled '115N05', the schematic shows it as being some kind of relay (it has a coil, wired across the 115V supply, and a pair of normally-open contacts that apply power to the B+ line).

I suspect the 115N05 is actually a thermal delay switch, but who made it? What is the delay time? (I can make up a solid-state replacement to get the equipment working if I know the necessary delay).

-Pete Lucas G6WBJ pjml%swmis.nsw.ac.uk@nsfnet-relay.ac.uk [Internet]
 pjml@uk.ac.nsw.swmis [JANET]
Voice and digital modes, 50MHz and up.....

Date: Tue, 29 Jun 93 01:46:07 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!caen!
usenet.coe.montana.edu!netnews.nwnet.net!serval!wsuaix.csc.wsu.edu!
i7994779@network.UCSD.EDU
To: info-hams@ucsd.edu

References <2950293698.0.p00361@psilink.com>,
<1993Jun28.002101.27578@uhura.neoucom.edu>,
<1993Jun28.181609.18418@newsgate.sps.mot.com>suai
Subject : Re: Field Day: a bummer!

I was operating at W7BI in Issaquah, WA we were 2A WWA. It was first time at FD and on the air and making a contact and everything else you can think of.

Anyway, we worked FL, PA, WPA, WV, CT, NY, TX, Russia on SAT, HW off the back of our 345 foot V at about 30-40 feet off the ground. I was REALLY impressed with the set-up. Heck, I was just impressed!!

Patrick D. Walters	Washington State University
i7994779@wsuaix.csc.wsu.edu	NW Collegiate Cycling Conference Director
Voice at (unavailable)	KB7VPO

Date: Tue, 29 Jun 1993 03:34:24 GMT
From: usc!howland.reston.ans.net!spool.mu.edu!olivea!apple.com!goofy.apple.com!
michael.apple.com!ems@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993Jun25.205903.23150@michael.apple.com>, <C9CuEs.FJ5@fc.hp.com>,
<1993Jun29.012441.6931@serval.net.wsu.edu>em
Subject : Re: [ANS] Wanted: Simple,Cheap,2m antenna project

In article <1993Jun29.012441.6931@serval.net.wsu.edu> i7994779@wsuaix.csc.wsu.edu (Patrick D. Walters;S100000) writes:

>In article <C9CuEs.FJ5@fc.hp.com> perry@fc.hp.com (Perry Scott) writes:
>>E. Michael Smith (ems@michael.apple.com) wrote:
>>
>>: At VHF PVC isn't very good since it starts to absorb signal... but
>>: at HF it should not be an issue.
>>
>>I have compared the RF absorption of PVC vs water in a microwave oven.
>>PVC does not absorb RF in the microwave region. Maybe your PVC is
>>different - give it the microwave oven test.
>>
>QST in teh July issue has an article on building 2m antennas that include
>using PVC. In one the actual wires are inside the PVC. Wouldn't the antenna
>be poor if if PVC absorbed signal? Since these were both meant for HTs I would
>assume PVC doesn't absorb signal.

OK, I'll recant! I was just parotting something that I'd read in
a magazine or book article long long ago ... It may well be that
PVC has since been vindicated.

--

E. Michael Smith ems@apple.COM

'Whatever you can do, or dream you can, begin it. Boldness has
genius, power and magic in it.' - Goethe

I am not responsible nor is anyone else. Everything is disclaimed.

End of Info-Hams Digest V93 #791
